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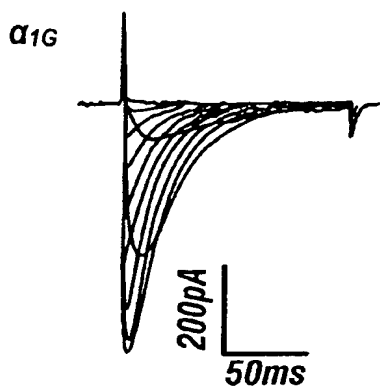


FIG. 1A

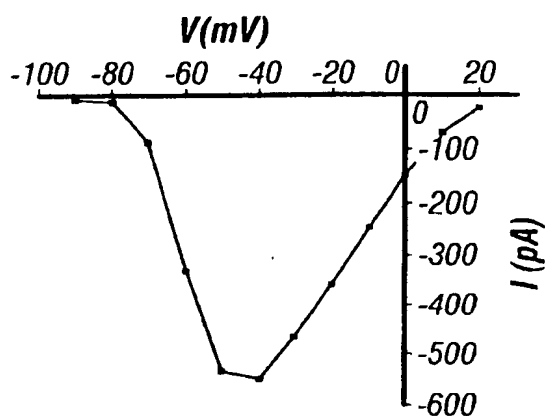


FIG. 1B

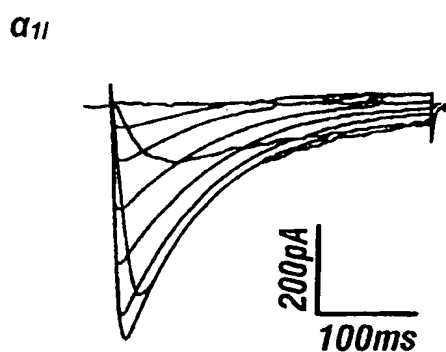


FIG. 2A

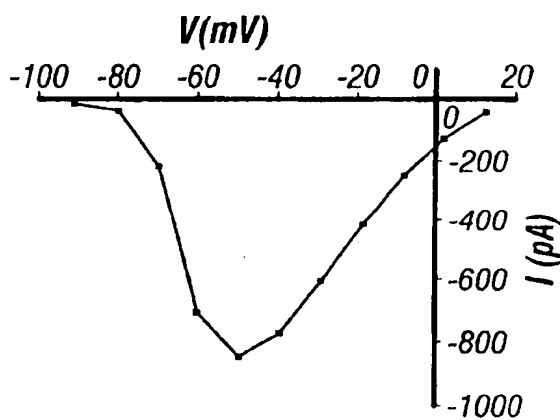


FIG. 2B

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Steady-state Inactivation

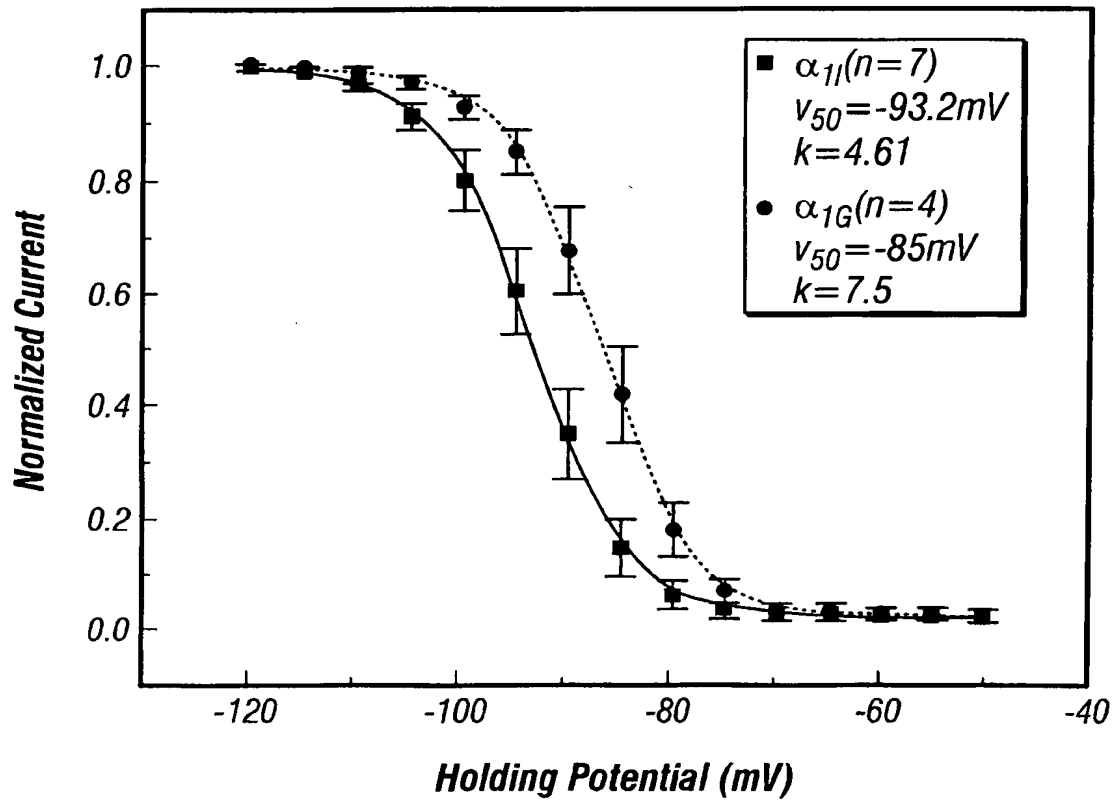
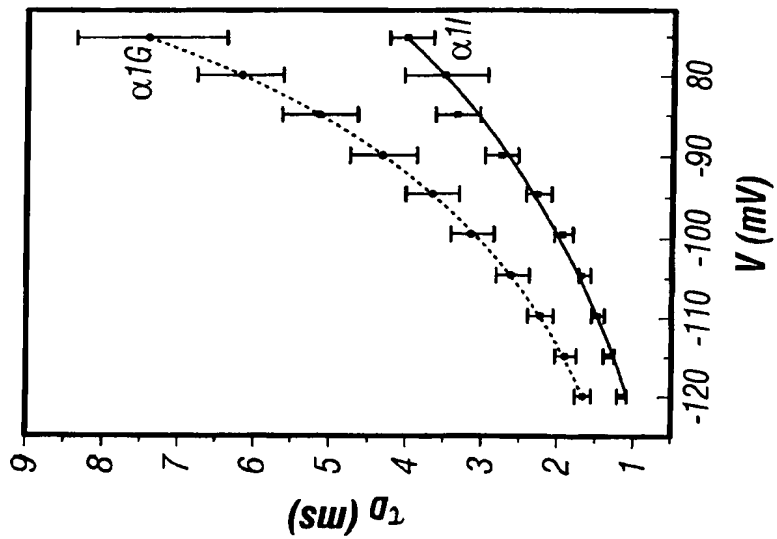
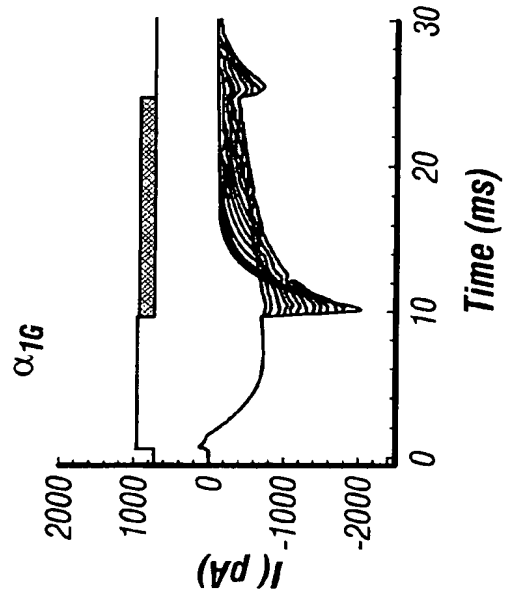
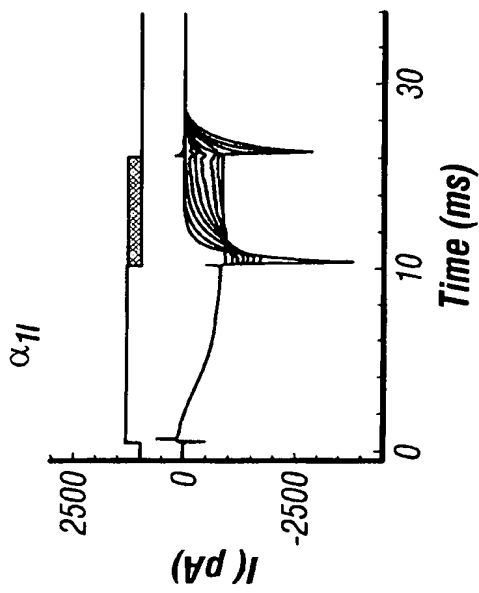


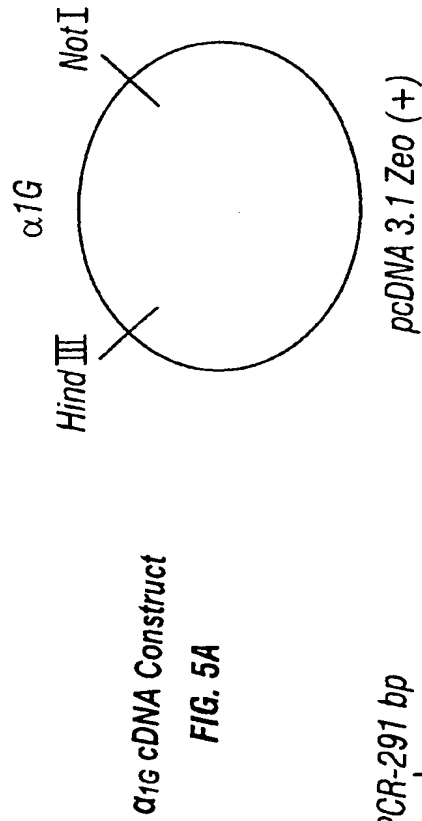
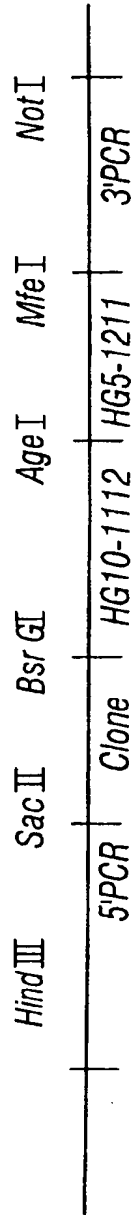
FIG. 3

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Deactivation



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α_{1G} cDNA Construct
FIG. 5A

5'PCR-291 bp

Clone 1- 1933 bp

HG10-1112-3915 bp

HG5-1211-3984 bp

α_{1G} cDNA Clones

FIG. 5B

3'PCR-1617 bp

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Human α_{1G} T-Type Calcium Channel cDNA

(SEQ ID NO:36)

1 aagcttgctgccccctctccggatcccgccggggccccggctggccagagg ATG GAC GAG GAG GAT GGA 71
1 (SEQ ID NO:37) M D E E D G 7
72 GCG GGC GCG GAG TCG GGA CAG CCC CGG AGC TTC ATG CCG CTC AAC GAC CTG TCG GGG 131
8 A G A E E S G Q P R S F M R L N D L S G 27
132 GCG GGC GCG CCG GCG GCG TCA GCA GAA AAG GAC CCG GGC AGC GCG GAC TCC GAG 191
28 A G G R P G P G S A E K D P G S A D S E 47
192 GCG GAG GGC CTG CCG GCG CTG GCG GTG GTT TTC TTC TAC TTG AGC CAG GAC 251
48 A E G L P Y P A L A P V V F Y L S Q D 67
252 AGC CCG CCG AGC TGG TGT CTC CGC AGC GTC TGT AAC CCC TGG TTT GAG CCG ATC AGC 311
68 S R P R S W C L R T V C N P W F E R I S 87
312 ATG TTG GTC ATC CTT CTC AAC TGC GTG ACC CTG GGC ATG TTC CGG CCA TGC GAG GAC ATC 371
88 M L V I L L N C V T L G M F R P C E D I 107
372 GCC TGT GAC TCC CAG CCG TGC CCG ATC CTG CAG GCC TTT GAT GAC TTC ATC TTT GCC TTC 431
108 A C D S Q R C R I L Q A F D D F I F A F 127
432 TTT GCC GTG GAG ATG GTG AAG ATG GTG GCC TTG GGC ATC TTT GGG AAA AAG TGT TAC 491
128 F A V E M V V K M V A L G I F G K K C Y 147
492 CTG GGA GAC ACT TGG AAC CCG CTT GAC TTT TTC ATC GTC ATC GCA GGG ATG CTG GAG TAC 551
148 L G D T W N R L D F F I V I A G M L E Y 167
552 TCG CTG GAC AAC GTC AGC TTC TCA GCT GTC AGG ACA GTC CGT GTG CTG CGA CCG 611
168 S L D L Q N V S F S A V R T V R V L R P 187

FIG. 6A

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612 CTC AGG GCC ATT AAC CGG GTG CCC AGC ATG CGC ATC CTT GTC ACG TTG CTG CTG GAT ACG 671
188 L R A I N R V P S M R I L V T L L L D T 207
672 CTG CCC ATG CTG GGC AAC GTC CTG CTG CTC TGC TTC TTC GTC TTC ATC TTC GGC ATC 731
208 L P M L G N V L L L C F F V F I F G I 227
732 GTC GGC GTC CAG CTG TGG GCA GGG CTG CTT CGG AAC CGA TGC TTC CTA CCT GAG AAT TTC 791
228 V G V Q L W A G L L R N R C F L P E N F 247
792 AGC CTC CCC CTG AGC GTG GAC CTG GAG CGC TAT TAC CAG ACA GAG AAC GAG GAT GAG AGC 851
248 S L P L S V D L E R Y Y Q T E N E D E S 267
852 CCC TTC ATC TGC TCC CAG CCA CGC GAG AAC GGC ATG CGG TCC TGC AGA AGC GTG CCC ACG 911
268 P F I C S Q P R E N G M R S C R S V P T 287
912 CTG CGC GGC GAC GGC GGT GGC CCA CCT TGC GGT CTG GAC TAT GAG GCC TAC AAC AGC 971
288 L R G D G G G P P C G L D Y E A Y N S 307
972 TCC AGC AAC ACC ACC TGT GTC AAC TGG AAC CAG TAC TAC ACC AAC TGC TCA GCG GCG GAG 1031
308 S S N T T C V N W N Q Y Y T N C S A G E 327
1032 CAC AAC CCC TTC AAG GGC GCC ATC AAC TTT GAC AAC ATT GGC TAT GCC TGG ATC GCC ATC 1091
328 H N P F K G A I N F D N I G Y A W I A I 347
1092 TTC CAG GTC ATC ACG CTG GAG GGC TGG GTC GAC ATC ATG TAC TTT GTG ATG GAT GCT CAT 1151
348 F Q V I T L E G W V D I M Y F V M D A H 367
1152 TCC TTC TAC AAT TTC ATC TAC TTC ATC CTC CTC ATC ATC GTG GGC TCC TTC TTC ATG ATC 1211
368 S F Y N F I Y F I L L I I V G S F F M I 387

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FIG. 6B

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1212 AAC CTG TGC CTG GTG GTG ATT GCC ACG CAG TTC TCA GAG ACC AAG CAG CGG GAA AGC CAG 1271
 388 N L C L V I A T Q F S E T K Q R E S Q 407
 1272 CTG ATG CGG GAG CAG CGT GTG CGG TTC CTG TCC AAC GCC AGC ACC CTG GCT AGC TTC TCT 1331
 408 L M R E Q R V R F L S N A S T L A S F S 427
 1332 GAG CCC GGC AGC TGC TAT GAG GAG CTG CTC AAG TAC CTG GTG TAC ATC CTT CGT AAG GCA 1391
 428 E P G S C Y E E L L K Y L V Y I L R K A 447
 1392 GCC CGC AGG CTG GCT CAG GTC TCT CGG GCA GCA GGT GTG CGG GTT GGG CGT CTC AGC AGC 1451
 448 A R R L A Q V S R A A G V R V G L L S S 467
 1452 CCA GCA CCC CTC GGG GGC CAG GAG ACC CAG CCC AGC AGC AGC TGC TCT CGC TCC CAC CGC 1511
 468 P A P L G G Q E T Q P S S S C S R S H R 487
 1512 CGC CTA TCC GTC CAC CAC CTG GTG CAC CAC CAC CAC CAT CAC CAC TAC CAC CTG 1571
 488 R L S V H H L V H H H H H H H H H Y H L 507
 1572 GGC AAT GGG ACG CTC AGG GCC CCC CGG GCC AGC CCG GAG ATC CAG GAC AGG GAT GCC AAT 1631
 508 G N G T L R A P R A S P E I Q D R D A N 527
 1632 GGG TCC CGC AGG CTC ATG CTG CCA CCA CCC TCG ACG CCT GCC CTC TCC GGG GCC CCC CCT 1691
 528 G S R R L M L P P P S T P A L S G A P P 547
 1692 GGT GGC GCA GAG TCT GTG CAC AGC TTC TAC CAT GCC GAC TGC CAC TTA GAG CCA GTC CGC 1751
 548 G G A E S V H S F Y H A D C H L E P V R 567
 1752 TGC CAG GCG CCC CCT CCC AGG TCC CCA TCT GAG GCA TCC GGC AGG ACT GTG GGC AGC GGG 1811
 568 C Q A P P P R S P S E A S G R T V G S G 587

FIG. 6C

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1812 AAG GTG TAT CCC ACC GTG CAC ACC AGC CCT CCA CCG GAG ACG CTG AAG GAG AAG GCA CTA 1871
588 K V Y P T V H T S P P P P E T L K E K A L 607
1872 GTA GAG GTG GCT GCC AGC TCT GGG CCC CCA ACC CTC ACC AGC CTC AAC ATC CCA CCC GGG 1931
608 V E V A A S S G P P T L T S L N I P P G 627
1932 CCC TAC AGC TCC ATG CAC AAG CTG CAG ACA CAG AGT ACA GGT GCC TGC CAA AGC TCT 1991
628 P Y S S M H K L L E T Q S T G A C Q S S 647
1992 TGC AAG ATC TCC AGC CCT TGC TTG AAA GCA GAC AGT GGA GCC TGT GGT CCA GAC AGC TGC 2051
648 C K I S S P C L K A D S G A C G P D S C 667
2052 CCC TAC TGT GCC CGG GCC GGG GCA GGG GAG GTG GAG CTC GCC GAC CGT GAA ATG CCT GAC 2111
668 P Y C A R A G A G E V E L A D R E M P D 687
2112 TCA GAC AGC GAG GCA GTT TAT GAG TTC ACA CAG GAT GCC CAG CAC AGC GAC CTC CGG GAC 2171
688 S D S E A V Y E F T Q D A Q H S D L R D 707
2172 CCC CAC AGC CGG CGG CAA CGG AGC CTG GGC CCA GAT GCA GAG CCC AGC TCT GTG CTG GCC 2231
708 P H S R R Q R S L G P D A E P S S V L A 727
2232 TTC TGG AGG CTA ATC TGT GAC ACC TTC CGA AAG ATT GTG GAC AGC AAG TAC TTT GGC CGG 2291
728 F W R L I C D T F R K I V D S K Y F G R 747
2292 GGA ATC ATG ATC GCC ATC CTG GTC AAC ACA CTC AGC ATG GGC ATC GAA TAC CAC GAG CAG 2351
748 G I M I A I L V N T L S M G I E Y H E Q 767
2352 CCC GAG GAG CTT ACC AAC GCC CTA GAA ATC AGC AAC ATC GTC TTC ACC AGC CTC TTT GCC 2411
768 P E E L T N A L E I S N I V F T S L F A 787

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FIG. 6D

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2412 CTG GAG ATG CTG CTG AAG CTG CTT GTG TAT GGT CCC TTT GGC TAC ATC AAG AAT CCC TAC 2471
788 L E M L L K L L V Y G P F G Y I K N P Y 807
2472 AAC ATC TTC GAT GGT GTC ATT GTG GTC ATC AGC GTG TGG GAG ATC GTG GGC CAG CAG GGG 2531
808 N I F D G V I V V I S V W E I V G Q Q G 827
2532 GGC CTG TCG GTG CTG CGG ACC TTC CGC CTG ATG CGT GTG CTG AAG CTG GTG CGC TTC 2591
828 G G L S V L R T F R L M R V L K L V R F 847
2592 CTG CCG GCG CTG CAG CGG CAG CTG GTG CTC ATG AAG ACC ATG GAC AAC GTG GCC ACC 2651
848 L P A L Q R Q L V V L M K T M D N V A T 867
2652 TTC TGC ATG CTG CTT ATG CTC TTC ATC TTC AGC ATC CTG GGC ATG CAT CTC TTC 2711
868 F C M L L M L F I F I S I L G M H L F 887
2712 GGC TGC AAG TTT GCC TCT GAG CGG GAT GGG GAC ACC CTG CCA GAC CGG AAG AAT TTT GAC 2771
888 G C K F A S E R D G D T L P D R K N F D 907
2772 TCC TTG CTC TGG GCC ATC GTC ACT GTC TTT CAG ATC CTG ACC CAG GAG GAC TGG AAC AAA 2831
908 S L L W A I V T V F Q I L T Q E D W N K 927
2832 GTC CTC TAC AAT GGT ATG GCC TCC ACG TCG TCC TGG GCG GCC CTT TAT TTC ATT GCC CTC 2891
928 V L Y N G M A S T S S W A A L Y F I A L 947
2892 ATG ACC TTC GGC AAC TAC GTG CTC TTC AAT TTG CTG GTC GCC ATT CTG GTG GAG GGC TTC 2951
948 M T F G N Y V L F N L L V A I L V E G F 967
2952 CAG GCG GAG GAA ATC AGC AAA CGG GAA GAT GCG AGT GGA CAG TTA AGC TGT ATT CAG CTG 3011
968 Q A E E I S K R E D A S G Q L S C I Q L 987

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FIG. 6E

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3012 CCT GTC GAC TCC CAG GGG GGA GAT GCC AAC AAG TCC GAA TCA GAG CCC GAT TTC TTC TCA 3071
 988 P V D S Q G G D A N K S E S E P D F F S 1007
 3072 CCC AGC CTG GAT GGT GAT GGG GAC AGG AAG AAG TGC TTG GCC TTG GTG TCC CTG GGA GAG 3131
 1008 P S L D G D G D R K K C L A L V S L G E 1027
 3132 CAC CCG GAG CTG CGG AAG AGC CTG CTG CCG CCT CTC ATC ATC CAC AGC GCC GGC ACA CCC 3191
 1028 H P E L R K S L L P P L I I H T A A T P 1047
 3192 ATG TCG CTG CCC AAG AGC ACC AGC GGC CTG GGC CTG GCG CCT GCG TCG CGC 3251
 1048 M S L P K S T S T G L G E A L G P A S R 1067
 3252 CGC ACC AGC AGC GGG TCG GCA GAG CCT GGG GCG GCC CAC GAG ATG AAG TCA CCG CCC 3311
 1068 R T S S S G S A E P G A A H E M K S P P 1087
 3312 AGC GCC CGC AGC TCT CCG CAC AGC CCC TGG AGC GCT GCA AGC AGC TGG ACC AGC AGG CGC 3371
 1088 S A R S S P H S P W S A A S S W T S R R 1107
 3372 TCC AGC CGG AAC AGC CTC GGC CGT GCA CCC AGC CTG AAG CGG AGA AGC CCA AGT GGA GAG 3431
 1108 S S R N S L G R A P S L K R R S P S G E 1127
 3432 CGG CGG TCC CTG TTG TCG GGA GAA GGC CAG GAG AGC CAG GAT GAA GAG AGC TCA GAA 3491
 1128 R R S L L S G E G Q E S Q D E E S S E 1147
 3492 GAG GAG CGG GCC AGC CCT GCG GGC AGT GAC CAT CGC CAC AGG GGG TCC CTG GAG CGG GAG 3551
 1148 E E R A S P A G S D H R H R G S L E R E 1167
 3552 GCC AAG AGT TCC TTT GAC CTG CCA GAC ACA CTG CAG CTG CCA GGG CTG CAT CGC ACT GCC 3611
 1168 A K S S F D L P D T L Q V P G L H R T A 1187

FIG. 6F

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3612 AGT GGC CGA GGG TCT GCT TCT GAG CAC CAG GAC TGC AAT CGC AAG TCG GCT TCA GGG CGC 3671
 1188 S G R G S A S E H Q D C N G K S A S G R 1207
 3672 CTG GCC CGG GCC CTG CGG CCT GAT GAC CCC CCA CTG GAT GGG GAT GAC GCC GAT GAC GAG 3731
 1208 L A R A L R P D D P P L D G D D A D D E 1227
 3732 GGC AAC CTG AGC AAA GGG GAA CGG GTC CGC GCG TGG ATC CGA GCC CGA CTC CCT GCC TGC 3791
 1228 G N L S K G E R V R A W I R A R L P A C 1247
 3792 TAC CTC GAG CGA GAC TCC TGG TCA CCC TAC ATC TTC CCT CCT CAG TCC AGG TTC CGC CTC 3851
 1248 Y L E R D S W S A Y I F P P Q S R F R L 1267
 3852 CTG TGT CAC CGG ATC ATC ACC CAC AAG ATG TTC GAC CAG GTG GTC CTT GTC ATC ATC TTC 3911
 1268 L C H R I I T H K M F D H V V L V I I F 1287
 3912 CTT AAC TGC ATC ACC ATC GCC ATG GAG CGC CCC AAA ATT GAC CCC CAC AGC GCT GAA CGC 3971
 1288 L N C I T I A M E R P K I D P H S A E R 1307
 3972 ATC TTC CTG ACC CTC TCC AAT TAC ATC TTC ACC GCA GTC TTT CTG GCT GAA ATG ACA GTG 4031
 1308 I F L T L S N Y I F T A V F L A E M T V 1327
 4032 AAG GTG GCA CTG GGC TGG TGC TTC GGG GAG CAG GCG TAC CTG CGG AGC AGT TGG AAC 4091
 1328 K V V A L G W C F G E Q A Y L R S S W N 1347
 4092 GTG CTG GAC GGG CTG TTG GTG CTC ATC TCC GTC ATC GAC ATT CTG GTG TCC ATG GTC TCT 4151
 1348 V L D G L L V L I S V I D I L V S M V S 1367
 4152 GAC AGC GGC ACC AAG ATC CTG GGC ATG CTG AGG GTG CTG CGG CTG CTG CGG ACC CTG CGC 4211
 1368 D S G T K I L G M L R V L R L L R T L R 1387

FIG. 6G

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4212 CCG CTC AGG GTG ATC AGC CGG GCG CAG GGG CTG AAG CTG GTG GTG GAG ACG CTG ATG TCC 4271
1388 P L R V I S R A Q G L K L V V E T L M S 1407
4272 TCA CTG AAA CCC ATC GGC AAC ATT GTA GTC ATC TGC TGT GCC TTC TTC ATC ATT TTC GGC 4331
1408 S L K P I G N I V V I C C A F F I I F G 1427
4332 ATC TTG GGG GTG CAG CTC TTC AAA GGG AAG TTT TTC GTG TGC CAG GGC GAG GAT ACC AGG 4391
1428 I L G V Q L F K G K F F V C Q G E D T R 1447
4392 AAC ATC ACC AAT AAA TCG GAC TGT GCC GAG GCC AGT TAC CGG TGG GTC CGG CAC AAG TAC 4451
1448 N I T N K S D C A E A S Y R W V R M K Y 1467
4452 AAC TTT GAC AAC CTT GGC CAG GCC CTG ATG TCC CTG TTC GTT TTG GCC TCC AAG GAT GGT 4511
1468 N F D N L G Q A L M S L F V L A S K D G 1487
4512 TGG GTG GAC ATC ATG TAC GAT GGG CTG GAT GCT GTG GGC GTG GAC CAG CAG CCC ATC ATG 4571
1488 W V D I M Y D G L D A V G V D Q Q P I M 1507
4572 AAC CAC AAC CCC TGG ATG CTG CTG TAC TTC ATC TCG TTC CTG CTC ATT GTG GCC TTC TTT 4631
1508 N H N P N W L L Y F I S F L L I V A F F 1527
4632 GTC CTG AAC ATG TTT GTG GGT GTG GTG GAG AAC TTC CAC AAG TGT AGG CAG CAC CAG 4691
1528 V L N M F V G V V V E N F H K C R Q H Q 1547
4692 GAG GAA GAG GAG GCC CGG CGG GAG GAG AAG CGC CTA CGA AGA CTG GAG AAA AAG AGA 4751
1548 E E E A R R R E E K R L R R L E K K R 1567
4752 AGG AAA GCC CAG TGC AAA CCT TAC TAC TCC GAC TAC TCC CGC TTC CGG CTC CTC GTC CAC 4811
1568 R K A Q C K P Y Y S D Y S R R F R L L V H 1587

FIG. 6H

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4812 CAC TTG TGC ACC AGC CAC TAC CTG GAC CTC TTC ATC ACA GGT GTC ATC GGG CTG AAC GTG 4871
 1588 H L C T S H Y L D L F I T G V I G L N V 1607
 4872 GTC ACC ATG GCC ATG GAG CAC TAC CAG CAG CCC CAG ATT CTG GAT GAG GCT CTG AAG ATC 4931
 1608 V T M A M E H Y Q Q P Q I L D E A L K I 1627
 4932 TGC AAC TAC ATC TTC ACT GTC ATC TTT GTC TTG GAG TCA GTT TTC AAA CTT GTG GCC TTT 4991
 1628 C N Y I F T V I F V L E S V F K L V A F 1647
 4992 GGT TTC CGT CGG TTC TTC CAG GAC AGG TGG AAC CAG CTG GAC CTG GCC ATT GTG CTG CTG 5051
 1648 G F R R F F Q D R W N Q L D L A I V L L 1667
 5052 TCC ATC ATG GGC ATC ACG CTG GAG GAA ATC GAG GTC AAC GCC TCG CTG CCC ATC AAC CCC 5111
 1668 S I M G I T L E E I E V N A S L P I N P 1687
 5112 ACC ATC ATC CGC ATC ATG AGG GTG CTG CGC ATT GCC CGA GTG CTG AAG CTG AAG ATG 5171
 1688 T I I R I M R V L R I A R V L K L L K M 1707
 5172 GCT GTG GGC ATG CGG GCG CTG GAC ACG GTG ATG CAG GCC CTG CCC CAG GTG GGG AAC 5231
 1708 A V G M R A L L D T V M Q A L P Q V G N 1727
 5232 CTG GGA CTT CTC TTC ATG TTG TTG TTT TTC ATC TTT GCA GCT CTG GGC GTG GAG CTC TTT 5291
 1728 L G L L F M L L F F I F A A L G V E L F 1747
 5292 GGA GAC CTG GAG TGT GAC GAG ACA CAC CCC TGT GAG GGC CTG GGC CGT CAT GCC ACC TTT 5351
 1748 G D L E C D E T H P C E G L G R H A T F 1767
 5352 CGG AAC TTT GGC ATG GCC TTC CTA ACC CTC TTC CGA GTC TCC ACA GGT GAC AAT TGG AAT 5411
 1768 R N F G M A F L T L F R V S T G D N W N 1787

FIG. 6I

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5412	GGC	ATT	ATG	AAG	GAC	ACC	CTC	CGG	GAC	TGT	GAC	CAG	GAG	TCC	ACC	TGC	TAC	AAC	ACG	GTC	5471
1788	G	I	M	K	D	T	L	R	D	C	D	Q	E	S	T	C	Y	F	T	V	1807
5472	ATC	TCG	CCT	ATC	TAC	TTT	GTG	TCC	TTG	CTG	CTG	ACG	GCC	CAG	TTC	GTG	CTA	GTC	AAC	GTG	5531
1808	I	S	P	I	Y	F	V	S	F	V	L	T	A	Q	F	V	L	V	N	V	1827
5532	GTG	ATC	GCC	GTG	CTG	ATG	AAG	CAC	CTG	GAG	GAG	AGC	AAC	AAG	GAG	GCC	AAG	GAG	GAG	GCC	5591
1828	V	I	A	V	L	M	K	H	L	E	E	S	N	K	E	A	K	E	E	A	1847
5592	GAG	CTA	GAG	GCT	GAG	CTG	GAG	CTG	GAG	ATG	AAG	ACC	CTC	AGC	CCC	CAG	CCC	CAC	TCG	CCA	5651
1848	E	L	E	A	E	L	E	L	E	M	K	T	L	S	P	Q	P	H	S	P	1867
5652	CTG	GGC	AGC	CCC	TTT	CTC	TGG	CCT	GGG	GTC	GAG	GGC	CCC	GAC	AGC	CCC	GAC	AGC	CCC	AAG	5711
1868	L	G	S	P	F	L	W	P	G	V	E	G	P	D	S	P	D	S	P	K	1887
5712	CCT	GGG	GCT	CTG	CAC	CCA	GCG	GCC	CAC	GCG	AGA	TCA	GCC	TCC	CAC	TTT	TCC	CTG	GAG	CAC	5771
1888	P	G	A	L	H	P	A	A	H	A	R	S	A	S	H	F	S	L	E	H	1907
5772	CCC	ACG	ATG	CAG	CCC	CAC	CCC	ACG	GAG	CTG	CCA	GGA	CCA	GAC	TTA	CTG	ACT	GTG	CGG	AAG	5831
1908	P	T	M	Q	P	H	P	T	E	L	P	G	P	D	L	L	T	V	R	K	1927
5832	TCT	GGG	GTC	AGC	CGA	ACG	CAC	TCT	CTG	CCC	AAT	GAC	AGC	TAC	ATG	TGT	CGG	CAT	GGG	AGC	5891
1928	S	G	V	S	R	T	H	S	L	P	N	D	S	Y	M	C	R	H	G	S	1947
5892	ACT	GCC	GAG	GGG	CCC	CTG	GGA	CAC	AGG	GCG	TGG	GGG	CTC	CCC	AAA	GCT	CAG	TCA	GGC	TCC	5951
1948	T	A	E	G	P	L	G	H	R	G	W	G	L	P	K	A	Q	S	G	S	1967
5952	GTC	TTG	TCC	GTT	CAC	TCC	CAG	CCA	GCA	GAT	ACC	AGC	TAC	ATC	CTG	CAG	CTT	CCC	AAA	GAT	6011
1968	V	L	S	V	H	S	Q	P	A	D	T	S	Y	I	L	Q	L	P	K	D	1987

FIG. 6J

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6012 GCA CCT CAT CTG CTC CAG CCC CAC AGC GCC CCA ACC TGG GGC ACC ATC CCC AAA CTG CCC 6071
1988 A P H L L Q P H S A P T W G T I P K L P 2007
6072 CCA CCA GGA CGC TCC CCT TTG GCT CAG AGG CCA CTC AGG CGC CAG GCA GCA ATA AGG ACT 6131
2008 P P G R S P L A Q R P L R R Q A A I R T 2027
6132 GAC TCC TTG GAC GTT CAG GGT CTG GGC AGC CGG GAA GAC CTG CTG GCA GAG GTG AGT GGG 6191
2028 D S L D V Q G L G S R E D L L A E V S G 2047
6192 CCC TCC CCG CCC CTG GCC CGG GCC TAC TCT TTC TGG GGC CAG TCA AGT ACC CAG GCA CAG 6251
2048 P S P P L A R A Y S F W G Q S S T Q A Q 2067
6252 CAG CAC TCC CGC AGC CAC AGC AAG ATC TCC AAG CAC ATG ACC CCG CCA GCC CCT TGC CCA 6311
2068 Q H S R S H S K I S K H M T P P A P C P 2087
6312 GGC CCA GAA CCC AAC TGG GGC AAG GGC CCT CCA GAG ACC AGA AGC AGC TTA GAG TTG GAC 6371
2088 G P E P N W G K G P P E T R S S L E L D 2107
6372 ACG GAG CTG AGC TGG ATT TCA GGA GAC CTC CTG CCC CCT GGC GGC CAG GAG CCC CCA 6431
2108 T E L S W I S G D L L P P G G Q E E P P 2127
6432 TCC CCA CGG GAC CTG AAG AAG TGC TAC AGC GTG GAG GCC CAG AGC TGC CAG CGC CGG CCT 6491
2128 S P R D L K K C Y S V E A Q S C Q R P 2147
6492 ACG TCC TGG CTG GAT GAG CAG AGG AGA CAC TCT ATC GCC GTC AGC TGC CTG GAC AGC GGC 6551
2148 T S W L D E Q R R H S I A V S C L D S G 2167
6552 TCC CAA CCC CAC CTG GGC ACA GAC CCC TCT AAC CTT GGC GGC CAG CCT CTT GGC GGC CCT 6611
2168 S Q P H L G T D P S N L G G Q P L G G P 2187

FIG. 6K

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6612 GGG AGC CGG CCC AAG AAA AAA CTC AGC CCG CCT AGT ATC ACC ATA GAC CCC CCC GAG AGC 6671
2188 G S R P K K L S P P S I T I D P P E S 2207
6672 CAA GGT CCT CGG ACC CCG CCC AGC CCT GGT ATC TGC CTC CGG AGG AGG GCT CCG TCC AGC 6731
2208 Q G P R T P P S P G I C L R R A P S S 2227
6732 GAC TCC AAG GAT CCC TTG GCC TCT GGC CCC CCT GAC AGC ATG GCT GCC TCG CCC TCC CCA 6791
2228 D S K D P L A S G P P D S M A A S P P 2247
6792 AAG AAA GAT GTG CTG AGT CTC TCC GGT TTA TCC TCT GAC CCA GCA GAC CTG GAC CCC TGA 6851
2248 K K D V L S L S G L S S D P A D L D P - 2267
6852 gtcctgccccactttcccaactcaccttttctccactgggtgc 6892

FIG. 6L

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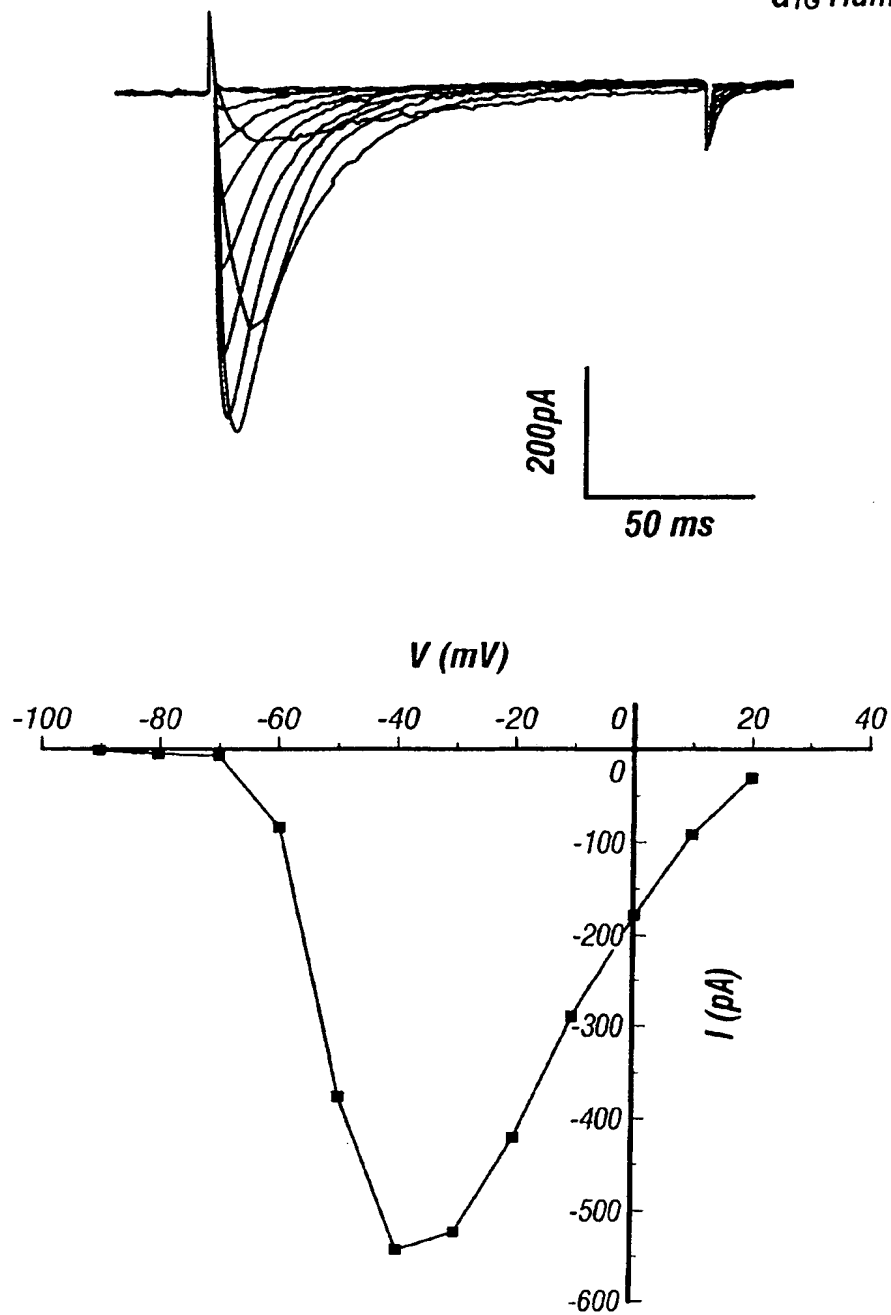
 α_{1G} Human 2mM Ca^{2+} 

FIG. 7

18/18**COMPARISON OF P-REGIONS**

I		II		III		IV		(SEQ ID NOS:38-43)				
LAASE	E	GWVYV	QIITQ	E	GWTDF	ETLSF	K	GWNVI	RCLTG	E	DWNDI	NIC-1 (C11D2.6)
LAASQ	E	GWVYV	QIITQ	E	GWTDV	ETLSY	K	GWNVV	RSVTG	E	DWNDI	NIC-2 (C27F2.3)
EASSQ	E	GWVFL	QILTQ	E	GWVDV	EVLSL	K	GWVEV	RIVTG	E	DWNKI	Rat -NIC
QCITM	E	GWTDV	QILTG	E	DWNSV	TVSTF	E	GWPEL	RCATG	E	AWQDI	L-Type Ca Channel
QVITL	E	GWVDI	QILTQ	E	DWNKV	VLASK	D	GWVDI	RVSTG	D	NWNGI	T-Type Ca Channel
RLMTQ	D	FWENL	RVLCG	E	WIETM	QVATF	K	GWMDI	QITTS	A	GWDGL	Na Channels

FIG. 8